

0590
0314

3



OIPE

RAW SEQUENCE LISTING

DATE: 03/18/2002

PATENT APPLICATION: US/10/042,091A

TIME: 16:02:09

Input Set : N:\Crif3\RULE60\10042091A.RAW

Output Set: N:\CRF3\03182002\J042091A.raw

1 <110> APPLICANT: Darrow, Andrew
 2 Andrade-Gordon, Patricia
 3 Qi, Jenson
 4 <120> TITLE OF INVENTION: DNA Encoding the Human Serine
 5 Protease EOS
 6 <130> FILE REFERENCE: ORT-1031
 7 <140> CURRENT APPLICATION NUMBER: 10/042,091A
 8 <141> CURRENT FILING DATE: 2002-01-08
 10 <150> PRIOR APPLICATION NUMBER: US/09/387,375
 11 <151> PRIOR FILING DATE: 1999-08-31
 13 <160> NUMBER OF SEQ ID NOS: 9
 14 <170> SOFTWARE: PatentIn Ver. 2.0
 16 <210> SEQ ID NO: 1
 17 <211> LENGTH: 1613
 18 <212> TYPE: DNA
 19 <213> ORGANISM: Homo sapiens
 20 <400> SEQUENCE: 1

```

21 ccacgcgtcc gaccagagtc caagccctag gcagtgccac ccttaccag cccagccttg 60
22 aagacagaat gagaggggtt tcctgtctcc aggtcctgct ccttctggtg ctgggagctg 120
23 ctgggactca gggaaggaag tctgcagcct gcgggcagcc ccgcatgtcc agtcggatcg 180
24 ttgggggccc ggatggccgg gacggagagt ggccgtggca ggcgagcatc cagcatcctg 240
25 gggcacacgt gtgcgggggg tcgtcatcg cccccagtg ggtgctgaca ggcgcgact 300
26 gcttccccag gagggcactg ccagctgagt accgcgtgcg cctgggggcg ctgcgtctgg 360
27 gctccacctc gccccgcacg ctctcggtag ccgtgcgacg ggtgctgctg cccccggact 420
28 actccgagga cggggccccg gcgcagctgg cactgctgca gctgcgtcgc ccggtgcccc 480
29 tgagcgctcg cgtccaaccc gtctgcctgc ccgtgcccgg cgcgcgcgcg ccgcccggca 540
30 caccatgccg ggtcaccggc tggggcagcc tccgcccagg agtgcccctc ccagagtggc 600
31 gaccgctaca aggagtaagg gtgccgctgc tggactcgcg cacctgcgac ggccctctacc 660
32 acgtgggcgc ggacgtgccc caggctgagc gcattgtgct gcctgggagt ctgtgtgccc 720
33 gctaccccc a gggccacaag gacgcctgcc aggggtgattc tgggggacct ctgacctgcc 780
34 tgcagtctgg gagctgggtc ctggtgggcg tggtagctg gggcaagggt tgtgccctgc 840
35 ccaaccgtcc aggggtctac accagtgtgg ccacatatag cccctggatt caggctcgcg 900
36 tcacttctaa tgctagccgg tgaggctgac ctggagccag ctgctggggt ccctcagcct 960
37 cctggttcat ccaggcacct gcctataccc cacatccctt ctgcctcgag gccaagatgc 1020
38 ctaaaaaagc taaaggccac cccacccccc acccaaccac ttctggctcc tctcctcttt 1080
39 ggggatcacc agctctgact ccaccaaccc tcatccagga atctgccatg agtcccaggg 1140
40 agtcacactc cccactccct tcctggcttg tatttacttt tcttggccct ggccagggct 1200
41 gggcgcaagg cacgcagtga tgggcaaacc aattgctgcc catctggcct gtgtgcccct 1260
42 ctttttctgg agaaagtcag attcacagca tgacagagat ttgacaccag ggagatcctc 1320
43 catagctggc tttgaggaca cggggaccac agccatgagc ggcctctaag agctgagaga 1380
44 cagccggcag ggaatcggaa ccctcagacc cacagccgca aggcactgga ttctggcagc 1440
45 accctgaagg agctgggaag taagtcttc cccagcctcc agataagagc cccgcgggcc 1500
46 aatcccttca tttcaacct aagagaccct aagcagagaa cctagctgag ccactcctga 1560

```

ENTERED

RAW SEQUENCE LISTING

DATE: 03/18/2002

PATENT APPLICATION: US/10/042,091A

TIME: 16:02:09

Input Set : N:\Crf3\RULE60\10042091A.RAW

Output Set: N:\CRF3\03182002\J042091A.raw

```

47      cctacaaagt tgtgacttaa taaatgtgtg ctttaagctg ccaaaaaaaaa aaa      1613
49 <210> SEQ ID NO: 2
50 <211> LENGTH: 20
51 <212> TYPE: DNA
52 <213> ORGANISM: Artificial Sequence
53 <220> FEATURE:
54 <223> OTHER INFORMATION: Description of Artificial Sequence:
55     oligonucleotide
56 <400> SEQUENCE: 2
57      gagaaagtca gattcacagc      20
59 <210> SEQ ID NO: 3
60 <211> LENGTH: 20
61 <212> TYPE: DNA
62 <213> ORGANISM: Artificial Sequence
63 <220> FEATURE:
64 <223> OTHER INFORMATION: Description of Artificial Sequence:
65     oligonucleotide
66 <400> SEQUENCE: 3
67      ctgcttaggg tctctttagg      20
69 <210> SEQ ID NO: 4
70 <211> LENGTH: 40
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial Sequence
73 <220> FEATURE:
74 <223> OTHER INFORMATION: Description of Artificial Sequence:
75     oligonucleotide
76 <400> SEQUENCE: 4
77      tgagcggcct ttaagagttg agagacagcc ggcaggggaat      40
79 <210> SEQ ID NO: 5
80 <211> LENGTH: 30
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: Description of Artificial Sequence:
85     oligonucleotide
86 <400> SEQUENCE: 5
87      gggatctaga ggacggagag tggccgtggc      30
89 <210> SEQ ID NO: 6
90 <211> LENGTH: 34
91 <212> TYPE: DNA
92 <213> ORGANISM: Artificial Sequence
93 <220> FEATURE:
94 <223> OTHER INFORMATION: Description of Artificial Sequence:
95     oligonucleotide
96 <400> SEQUENCE: 6
97      ctcatctaga agcattagaa gtgacgcgag cctg      34
99 <210> SEQ ID NO: 7
100 <211> LENGTH: 284
101 <212> TYPE: PRT

```

RAW SEQUENCE LISTING

DATE: 03/18/2002

PATENT APPLICATION: US/10/042,091A

TIME: 16:02:09

Input Set : N:\Crf3\RULE60\10042091A.RAW

Output Set: N:\CRF3\03182002\J042091A.raw

102 <213> ORGANISM: Homo sapiens

103 <400> SEQUENCE: 7

```

104   Met Arg Gly Val Ser Cys Leu Gln Val Leu Leu Leu Val Leu Gly
105       1           5           10           15
106   Ala Ala Gly Thr Gln Gly Arg Lys Ser Ala Ala Cys Gly Gln Pro Arg
107           20           25           30
108   Met Ser Ser Arg Ile Val Gly Gly Arg Asp Gly Arg Asp Gly Glu Trp
109           35           40           45
110   Pro Trp Gln Ala Ser Ile Gln His Pro Gly Ala His Val Cys Gly Gly
111           50           55           60
112   Ser Leu Ile Ala Pro Gln Trp Val Leu Thr Ala Ala His Cys Phe Pro
113           65           70           75           80
114   Arg Arg Ala Leu Pro Ala Glu Tyr Arg Val Arg Leu Gly Ala Leu Arg
115           85           90           95
116   Leu Gly Ser Thr Ser Pro Arg Thr Leu Ser Val Pro Val Arg Arg Val
117           100          105          110
118   Leu Leu Pro Pro Asp Tyr Ser Glu Asp Gly Ala Arg Gly Asp Leu Ala
119           115          120          125
120   Leu Leu Gln Leu Arg Arg Pro Val Pro Leu Ser Ala Arg Val Gln Pro
121           130          135          140
122   Val Cys Leu Pro Val Pro Gly Ala Arg Pro Pro Gly Thr Pro Cys
123           145          150          155          160
124   Arg Val Thr Gly Trp Gly Ser Leu Arg Pro Gly Val Pro Leu Pro Glu
125           165          170          175
126   Trp Arg Pro Leu Gln Gly Val Arg Val Pro Leu Leu Asp Ser Arg Thr
127           180          185          190
128   Cys Asp Gly Leu Tyr His Val Gly Ala Asp Val Pro Gln Ala Glu Arg
129           195          200          205
130   Ile Val Leu Pro Gly Ser Leu Cys Ala Gly Tyr Pro Gln Gly His Lys
131           210          215          220
132   Asp Ala Cys Gln Gly Asp Ser Gly Gly Pro Leu Thr Cys Leu Gln Ser
133           225          230          235          240
134   Gly Ser Trp Val Leu Val Gly Val Val Ser Trp Gly Lys Gly Cys Ala
135           245          250          255
136   Leu Pro Asn Arg Pro Gly Val Tyr Thr Ser Val Ala Thr Tyr Ser Pro
137           260          265          270
138   Trp Ile Gln Ala Arg Val Thr Ser Asn Ala Ser Arg
139           275          280

```

141 <210> SEQ ID NO: 8

142 <211> LENGTH: 1130

143 <212> TYPE: DNA

144 <213> ORGANISM: Artificial Sequence

145 <220> FEATURE:

146 <223> OTHER INFORMATION: Description of Artificial Sequence: Nucleic acid
 147 sequence of EOS zymogen fusion gene

148 <400> SEQUENCE: 8

```

149   gaattcacca ccatggacag caaagggttcg tcgcagaaat cccgcctgct cctgctgctg 60
150   gtgggtgtcaa atctactcctt gtgccagggt gtggtctccg actacaagga cgacgacgac 120
151   gtggacgcgg ccgctcttgc tgcccccttt gatgatgatg acaagatcgt tgggggctat 180

```

RAW SEQUENCE LISTING

DATE: 03/18/2002

PATENT APPLICATION: US/10/042,091A

TIME: 16:02:09

Input Set : N:\Crf3\RULE60\10042091A.RAW

Output Set: N:\CRF3\03182002\J042091A.raw

```

152 gctctagagg acggagagtg gccgtggcag gcgagcatcc agcatcctgg ggcacacgtg 240
153 tgcgggggggt cgtcatcgc cccccagtgg gtgctgacag cggcgactg cttccccagg 300
154 agggcactgc cagctgagta ccgcgtgcgc ctggggggcgc tgcgtctggg ctccacctcg 360
155 cccgcacgc tctcgggtgcc cgtgcgacgg gtgctgctgc ccccgacta ctccgaggac 420
156 ggggcccgcg gcgacctggc actgctgcag ctgcgtgcgc cgggtgcccct gagegctcgc 480
157 gtccaacccg tctgcctgcc cgtgcccggc gcccgccgc cggccggcac accatgccgg 540
158 gtcaccggct ggggcagcct ccgcccagga gtgcccctcc cagagtggcg accgctacaa 600
159 ggagtaaggg tgccgctgct ggactcgcgc acctgcgacg gcctctacca cgtgggcgcg 660
160 gacgtgcccc aggctgagcg cattgtgctg cctgggagtc tgtgtgccgg ctacccccag 720
161 ggccacaagg acgcctgcca ggggtgattct gggggacctc tgacctgcct gcagtctggg 780
162 agctgggtcc tgggtggcgt ggtgagctgg ggcaagggtt gtgccctgcc caaccgtcca 840
163 ggggtctaca ccagtgtggc cacatatagc cctggattc aggtcgcgt cacttctaata 900
164 gcttctagat acccctaagg tgtgcccgat tacgccccta gacatcacca tcaccatcac 960
165 tagcggccgc ttcccttttag tgagggttaa tgcttcgagc agacatgata agatacattg 1020
166 atgagtttgg acaaacacaca actagaatgc agtgaaaaaa atgctttatt tgtgaaattt 1080
167 gtgatgctat tgctttattt gtaaccatta taagctgcaa taaacaagtt 1130
169 <210> SEQ ID NO: 9
170 <211> LENGTH: 316
171 <212> TYPE: PRT
172 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Description of Artificial Sequence: Amino acid
175 sequence of EOS zymogen fusion gene
176 <400> SEQUENCE: 9
177 Met Asp Ser Lys Gly Ser Ser Gln Lys Ser Arg Leu Leu Leu Leu Leu
178 1 5 10 15
179 Val Val Ser Asn Leu Leu Leu Cys Gln Gly Val Val Ser Asp Tyr Lys
180 20 25 30
181 Asp Asp Asp Asp Val Asp Ala Ala Ala Leu Ala Ala Pro Phe Asp Asp
182 35 40 45
183 Asp Asp Lys Ile Val Gly Gly Tyr Ala Leu Glu Asp Gly Glu Trp Pro
184 50 55 60
185 Trp Gln Ala Ser Ile Gln His Pro Gly Ala His Val Cys Gly Gly Ser
186 65 70 75 80
187 Leu Ile Ala Pro Gln Trp Val Leu Thr Ala Ala His Cys Phe Pro Arg
188 85 90 95
189 Arg Ala Leu Pro Ala Glu Tyr Arg Val Arg Leu Gly Ala Leu Arg Leu
190 100 105 110
191 Gly Ser Thr Ser Pro Arg Thr Leu Ser Val Pro Val Arg Arg Val Leu
192 115 120 125
193 Leu Pro Pro Asp Tyr Ser Glu Asp Gly Ala Arg Gly Asp Leu Ala Leu
194 130 135 140
195 Leu Gln Leu Arg Arg Pro Val Pro Leu Ser Ala Arg Val Gln Pro Val
196 145 150 155 160
197 Cys Leu Pro Val Pro Gly Ala Arg Pro Pro Pro Gly Thr Pro Cys Arg
198 165 170 175
199 Val Thr Gly Trp Gly Ser Leu Arg Pro Gly Val Pro Leu Pro Glu Trp
200 180 185 190
201 Arg Pro Leu Gln Gly Val Arg Val Pro Leu Leu Asp Ser Arg Thr Cys

```

RAW SEQUENCE LISTING

DATE: 03/18/2002

PATENT APPLICATION: US/10/042,091A

TIME: 16:02:09

Input Set : N:\Crf3\RULE60\10042091A.RAW

Output Set: N:\CRF3\03182002\J042091A.raw

202		195		200		205
203	Asp	Gly	Leu	Tyr	His	Val
204		210		215		220
205	Val	Leu	Pro	Gly	Ser	Leu
206		225		230		235
207	Ala	Cys	Gln	Gly	Asp	Ser
208				245		250
209	Ser	Trp	Val	Leu	Val	Gly
210				260		265
211	Pro	Asn	Arg	Pro	Gly	Val
212				275		280
213	Ile	Gln	Ala	Arg	Val	Thr
214				290		295
215	Pro	Asp	Tyr	Ala	Ala	Arg
216				305		310

VERIFICATION SUMMARY

DATE: 03/18/2002

PATENT APPLICATION: US/10/042,091A

TIME: 16:02:10

Input Set : N:\Crf3\RULE60\10042091A.RAW

Output Set: N:\CRF3\03182002\J042091A.raw